

REMARKS

The application has been reviewed in light of the Non-Final Office Action mailed November 28, 2005. At the time of the Non-Final Office Action, claims 1-38 were pending in this application. Claims 1-38 have been rejected.

Claim Rejections 35 U.S.C. § 102(b) - Loomis

Claims 1-4, 7-9, 13-21, 23, 26, 27, 29-35, 37, and 38 have been rejected under 35 U.S.C. 102(b) as being anticipated by Loomis (2,780,294).

Applicants respectfully traverse this rejection as to claims 1-4, 7-9, 13-21, 23, 26, 27, 29-35, 37, and 38.

In light of the clarification regarding the meaning of “dispose” and any variations thereof, Loomis does not disclose “a disposable downhole tool,” as required by independent claims 1, 29, and 32. Rather, Loomis describes “a packer assembly . . . which may [] be withdrawn when the necessity arises and reused.” (Column 1, lines 17-21). The disclosure of Loomis repeatedly mentions reusing the device. See column 1, lines 21 and 66, and column 6, lines 2-3. This does not suggest in any way “a disposable downhole tool.” In fact, Loomis indicates that disposable downhole tools are undesirable, stating: “Various types of lead sleeves have been used in the past as packings for packer assemblies, but these packer assemblies are not retrievable once the packings have been expanded in the well casing as they will not regain their original shape for removal.” (Column 1, lines 66-70).

Accordingly, independent claims 1, 29, and 32, and corresponding claims 2-4, 7-9, 13-21, 23, 26, 27, 30, 31, 33-35, 37, and 38 depending therefrom, are patentable over Loomis

for at least the reasons stated above. Therefore, Applicants request Examiner to withdraw his rejection of these claims and allow them to issue.

Claim Rejections 35 U.S.C. § 102(b) - Thornton

Claims 1-4, 7-9, 13, 16-20, 23, 24, 25, 29, 32-35, and 37 have been rejected under 35 U.S.C. 102(b) as being anticipated by Thornton, Jr. (5,350,016) (“Thornton”).

Applicants respectfully traverse this rejection as to claims 1-4, 7-9, 13, 16-20, 23, 24, 25, 29, 32-35, and 37.

As to claims 1, 28, and 29, Thornton does not disclose “a compression element” or “an external sealing element” as required by the independent claims. Rather, Thornton describes a segmented slip, not a tool. A slip is used to suspend and does not have a “compression element.” As indicated in Applicants’ specification, a slip 26 may be included, along with a sealing element 32, in a well plug 12. However, the slip 26 is not analogous to the compression element 50 or the sealing element 32. Additionally, the segmented slip of Thornton is fragmented before it is used, so that it can move laterally “while maintaining the slip segment’s slidable engagement with the tool.” (Column 2, lines 2-3). In other words, the slip breaks into a plurality of slip parts in order to bite into a pipe to hold a tool (such as a bridge plug) in place at that particular location. (Column 3, lines 10-12).

Thornton further indicates that it is undesirable for the slip parts (18) to fall to the bottom of the wellbore. (Column 3, lines 39-49). Specifically, Thornton states “all slidable engagement of slip parts 18 through 20 with tool 4 is lost and unrestrained parts 18 through 10 become useless debris at the bottom of the wellbore rather than serving as an integral part of the bridge plug 4.” (Column 3, lines 50-54). In the instant claims, on the other hand, the tool is

disposable, and it is desirable that the segmenting event results in the compression element being released. This is the opposite of the breaking of the slip (8) into slip parts (18), which results in engagement, as indicated in Thornton.

As to claim 32, for analogous reasons to those stated above with respect to claims 1, 28, and 29, the segmenting of Thornton does not “aid in the disposal of the downhole tool.”

Accordingly, independent claims 1, 28, 29, and 32, and corresponding claims 2-4, 7-9, 13, 16-20, 23, 24, 25, 33-35, and 37 depending therefrom, are patentable over Thornton for at least the reasons stated above. Therefore, Applicants request that Examiner withdraw his rejection of these claims and allow them to issue.

Claim Rejections 35 U.S.C. § 102(b) - Hushbeck

Claims 1, 2, and 22 have been rejected under 35 U.S.C. 102(b) as being anticipated by Hushbeck et al. (5,701,959) (“Hushbeck”).

Applicants respectfully traverse this rejection as to claims 1, 2, and 22.

As to claim 1, Hushbeck does not disclose “a compression element.” Rather, Hushbeck describes a packer shoe 150, which is not a compression element. Similar to the slip of Thornton, a packer shoe is “for axially retaining the at least one packer element about the mandrel.” (Column 5, lines 7-9). See also, column 6, lines 44-46.

Therefore for reasons analogous to those stated with respect to Thornton, Hushbeck does not disclose “a compression element . . . and at least one preconfigured division in the compression element,” as required by claim 1.

Accordingly, independent claim 1, and corresponding claims 2 and 22 depending therefrom, are patentable over Hushbeck for at least the reasons stated above. Therefore, Applicants request that Examiner withdraw his rejection of these claims and allow them to issue.

Claim Rejections 35 U.S.C. § 102(e) - Schwendemann

Claims 1-9, 13, 16, 24-26, 28-30, 32-35, 37, and 38 have been rejected under 35 U.S.C. 102(e) as being anticipated by Schwendemann et al. (2003/0213601) ("Schwendemann").

Applicants respectfully traverse this rejection as to claims 1-9, 13, 16, 24-26, 28-30, 32-35, 37, and 38.

In light of the clarification regarding the meaning of "dispose" and any variations thereof, Schwendemann does not disclose "a disposable downhole tool," as required by independent claims 1, 28, 29, and 32. Rather, Schwendemann describes a seal assembly and method of setting the seal assembly, with no reference to any method of disposal. Examiner states that "Schwendemann et al discloses a segmented element 190." However, the segmented element 190 of Schwendemann is not useful for disposal. Instead, the segmented element 190 is preferably "subjected to a crosslinking reaction to increase the strength and resiliency . . . and to unitize segments . . . into an annular member." (Paragraph [0050]). This would inhibit disposal. Further, after the crosslinking reaction, the resulting annular member would lack the preconfigured/presegmented characteristic of claims 1, 28, 29, and 32.

Accordingly, independent claims 1, 28, 29, and 32, and corresponding claims 2-9, 13, 16, 24-26, 30, 33-35, 37, and 38 depending therefrom, are patentable over Schwendemann for at least the reasons stated above. Therefore, Applicants request that Examiner withdraw his rejection of these claims and allow them to issue.

Claim Rejections 35 U.S.C. § 103(a) - Loomis

Claims 10-12, and 36 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Loomis.

Applicants respectfully traverse this rejection as to claims 10-12, and 36.

As stated above, Loomis does not teach a “disposable” downhole tool. Further, Examiner correctly states that “it is not explicitly taught that the segmenting occurs in connection with releasing the downhole tool, with releasing the compression element from a compression state, or with the destruction of one or more substantial structural parts of the disposable downhole tool in a wellbore.” In fact, the teaching of Loomis indicates that the segmenting causes the *setting* of the tool.

As to claims 10 and 36, the segmenting of Loomis would not be obvious in connection with releasing the downhole tool. Since setting necessarily occurs *before* releasing the tool, it would be senseless to segment (and thus set) a tool upon release. As to claim 12, it would also be counterproductive for the segmenting of Loomis to take place in connection with the destruction of a substantial structural part. Applicants can find no logical reason to destroy a substantial structural part in order to set the tool.

Examiner made the following statement on page 8 of the Office Action dated November 28, 2005:

[I]t would have been obvious to one of ordinary skill in the art that, if the packing 18 were to be placed in an area downhole where the inner diameter of the casing became too large . . . then, upon actuation of the device, the rings 26 would become overstressed and be destroyed. Thereafter, the segments 24 would simply go past the edge of packer head 16 and either fall

into the wellbore, or become caught up in the production/drilling fluids. Evidence of such events can be seen in Figures 1-4 of US patent 5,350,016.

Even if overextension of the device of Loomis may cause the device to be destroyed, this destruction is undesirable, and one of ordinary skill in the art would seek to avoid this outcome. Overextension would prevent the device from setting, its intended function. That is, the device would be destroyed before it was ever used. This would make the insertion of the device into the wellbore an entirely pointless endeavor, as the device would have no utility whatsoever. This position is supported by the statement in Thornton (5,350,016) that “all slidable engagement of slip parts 18 through 20 with tool 4 is lost and *unrestrained parts . . . become useless debris at the bottom of the wellbore rather than serving as an integral part of the bridge plug 4.*” (Column 3, lines 50-54) (emphasis added). Therefore, the instant claims were not obvious in light of Loomis at the time of invention.

Accordingly, dependent claims 10-12, and 36 are patentable over Loomis for at least the reasons stated above. Therefore, Applicants request that Examiner withdraw his rejection of these claims and allow them to issue.

SUMMARY

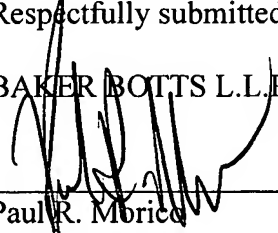
In light of the above amendments and remarks, Applicants respectfully submit that the application is now in condition for allowance and earnestly solicit early notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile or electronic mail, as indicated below.

Applicants believe that there are no fees due in association with the filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for any extensions of time, Applicants respectfully request that the Commissioner accept this as a Petition therefore, and direct that any fees be debited from Baker Botts L.L.P., Deposit Account No. 02-0383, (*formerly Baker & Botts, L.L.P.*) Order Number 063718.0158.

Respectfully submitted,

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